

LISTING OF CLAIMS

What is claimed is:

1. (original) A transom mounted watercraft drive unit comprising:

a) a support plate mounted to the watercraft transom, said support plate having a sleeve for receiving a first drive shaft, said first drive shaft extending through said transom and said transom sleeve;

b) an upper bracket and a lower bracket mounted to said support plate, said upper bracket having an upper pivot attachment means and said lower bracket having a lower pivot attachment means;

c) a pivot member pivotally attached to said support plate between said upper bracket and said lower bracket at said upper and lower pivot attachment means whereby said pivot member may be pivoted horizontally;

d) a double universal joint positioned within said pivot member, said double universal joint being connected to said first drive shaft;

e) a drive shaft housing pivotally connected to said pivot member whereby said drive shaft housing may be pivoted vertically on said pivot member;

f) a second drive shaft positioned within said drive shaft housing, said second drive shaft connected to said double universal joint whereby said drive shaft maybe pivoted vertically and horizontally;

g) a propeller mounted to said second propeller shaft;

h) a single action spring-return hydraulic ram, said ram having a housing, a piston and a piston rod, said housing being pivotally attached to said pivot member and said piston rod being pivotally attached to said drive shaft housing; and

i) means for moving said piston and thereby said piston rod of said hydraulic ram to raise and lower said drive shaft housing and thereby said propeller.

2. (original) The watercraft drive unit as recited in claim 1, further comprising a steering arm for moving said pivot member and thereby said shaft housing horizontally with respect to the said watercraft.

3. (currently amended) The watercraft drive unit as recited in claim 2, ~~wherein said~~ further comprising means for remotely controlling the movement of said piston of said hydraulic ram.

4. (original) The watercraft drive unit as recited in claim 3, wherein said shaft housing includes a bearing for supporting said second shaft member.

5. (currently amended) The watercraft drive unit as recited in ~~claim 5~~ claim 4, wherein said propeller is a weedless propeller.

6. (original) The watercraft drive unit as recited in claim 5 wherein said steering arm is hydraulically actuated.

7. (currently amended) ~~The watercraft drive unit as recited in claim 3, wherein said spring return hydraulic ram includes a gas return mechanism.~~ A transom mounted watercraft drive unit comprising:

a) a support plate mounted to the watercraft transom, said support plate having a sleeve for receiving a first drive shaft, said first drive shaft extending through said transom and said transom sleeve;

b) an upper bracket and a lower bracket mounted to said support plate, said upper bracket having an upper pivot attachment means and said lower bracket having a lower pivot attachment means;

c) a pivot member pivotally attached to said support plate between said upper bracket and said lower bracket at said upper and lower pivot attachment means whereby said pivot member may be pivoted horizontally;

d) a double universal joint positioned within said pivot member, said double universal joint being connected to said first drive shaft;

e) a drive shaft housing pivotally connected to said pivot member whereby said drive shaft housing may be pivoted vertically on said pivot member;

f) a second drive shaft positioned within said drive shaft housing, said second drive shaft connected to said double universal joint whereby said drive shaft maybe pivoted vertically and horizontally;

g) a propeller mounted to said second propeller shaft;

h) a single action gas return hydraulic ram, said ram having a housing, a piston and a piston rod, said housing being pivotally attached to said pivot member and said piston rod being pivotally attached to said drive shaft housing;

i) means for moving said piston and thereby said piston rod of said hydraulic ram to raise and lower said drive shaft housing and thereby said propeller;

j) a steering arm for moving said pivot member and thereby said shaft housing horizontally with respect to the said watercraft; and
k) means for remotely controlling the movement of said piston of said hydraulic ram.

8. (original) The watercraft drive unit as recited in claim 3, further comprising a skeg plate attached to said drive shaft housing.

9. (original) The watercraft drive unit as recited in claim 8, further comprising a shroud covering pivot member and said universal joint.

10. (original) A transom mounted watercraft drive unit comprising:

a) a pivot member pivotally attached to the transom of a watercraft whereby said pivot member may be pivoted horizontally with respect to the longitudinal axis of the watercraft;

b) a first drive shaft extending through said transom to said pivot member;

c) a double universal joint positioned within said pivot member, said double universal joint being connected to said first drive shaft;

d) a drive shaft housing pivotally connected to said pivot member whereby said drive shaft housing may be pivoted vertically on said pivot member;

e) a second drive shaft positioned within said drive shaft housing, said second drive shaft connected to said double universal joint whereby said drive shaft maybe pivoted both vertically and horizontally;

f) a propeller mounted to said second propeller shaft;

g) a single action spring-return hydraulic ram, said ram having a housing, a piston and a piston rod, said housing being pivotally attached to said pivot member and said piston rod being pivotally attached to said drive shaft housing; and

h) means for moving said piston and thereby said piston rod of said hydraulic ram to raise and lower said drive shaft housing and thereby said propeller.

11. (original) The watercraft drive unit as recited in claim 10, further comprising a steering arm for moving said pivot member and thereby said shaft housing horizontally with respect to the said watercraft.

12. (currently amended) The watercraft drive unit as recited in claim 11, ~~wherein said~~ further comprising means for remotely controlling the movement of said piston of said hydraulic ram.

13. (original) The watercraft drive unit as recited in claim 10, wherein said shaft housing includes a bearing for supporting said second shaft member.

14. (original) The watercraft drive unit as recited in claim 12 wherein said steering arm is hydraulically actuated.

15. (original) The watercraft drive unit as recited in claim 14, wherein said propeller is a weedless propeller.

16. (currently amended) ~~The watercraft drive unit as recited in claim 15, wherein said spring return hydraulic ram includes a gas return mechanism.~~ A transom mounted watercraft drive unit comprising:

a) a pivot member pivotally attached to the transom of a watercraft whereby said pivot member may be pivoted horizontally with respect to the longitudinal axis of the watercraft;

b) a first drive shaft extending through said transom to said pivot member;

c) a double universal joint positioned within said pivot member, said double universal joint being connected to said first drive shaft;

d) a drive shaft housing pivotally connected to said pivot member whereby said drive shaft housing may be pivoted vertically on said pivot member;

e) a second drive shaft positioned within said drive shaft housing, said second drive shaft connected to said double universal joint whereby said drive shaft maybe pivoted both vertically and horizontally;

f) a weedless propeller mounted to said second propeller shaft;

g) a single action gas-return hydraulic ram, said ram having a housing, a piston and a piston rod, said housing being pivotally attached to said pivot member and said piston rod being pivotally attached to said drive shaft housing;

h) means for moving said piston and thereby said piston rod of said hydraulic ram to raise and lower said drive shaft housing and thereby said propeller;

i) a hydraulically actuated steering arm for moving said pivot member and thereby said shaft housing horizontally with respect to the said watercraft; and

j) means for remotely controlling the movement of said piston of said hydraulic ram.

17. (original) The watercraft drive unit as recited in claim 16, further comprising a skeg plate attached to said drive shaft housing.

18. (original) The watercraft drive unit as recited in claim 17, further comprising a cavitation plate mounted on said shaft housing above said propeller.

19. (original) A method of propelling a watercraft in shallow water comprising the steps of:

- a) pivotally attaching a box to the transom of said watercraft whereby said a said box may be pivoted horizontally with respect to the longitudinal axis of the watercraft;
- b) extending a first drive shaft through said transom to said box;
- c) attaching a double universal joint to said first drive shaft;
- d) pivotally attaching a drive shaft housing to said box pivot member whereby said drive shaft housing may be pivoted vertically on said box;
- e) connecting a second drive shaft to said double universal joint whereby said drive shaft maybe pivoted both vertically and horizontally;
- f) mounting a propeller to said second propeller shaft;
- g) attaching a single action spring-return hydraulic ram, said ram having a housing, a piston and a piston rod, whereby said housing is pivotally attached to said box and said piston rod is pivotally attached to said drive shaft housing; and
- h) providing means for moving said piston and thereby said piston rod of said hydraulic ram to raise and lower said drive shaft housing and thereby said propeller.

20. (original) The method as recited in claim 19, further comprising the steps of:

(a) attaching a steering arm to said box for turning said box and thereby said shaft housing horizontally with respect to the said watercraft;

(b) providing means for remotely controlling the movement of said piston of said hydraulic ram;

(c) supporting said second shaft member on bearings within said shaft housing;

(d) attaching a skeg plate to said drive shaft housing; and

(e) attaching a cavitation plate on said shaft housing above said propeller.

21. (new) A transom mounted watercraft drive unit comprising:

a) a drive shaft support means for supporting a drive shaft log on the watercraft transom;

b) a drive shaft supported within said drive shaft log;

c) means for rotating said drive shaft within said drive shaft log;

d) a propeller mounted to said drive shaft;

e) means for horizontally pivoting said drive shaft log; and

f) a hydraulic ram, said hydraulic ram having a longitudinally extending ram housing, said ram housing having a first housing end and a second housing end, a piston disposed within said ram housing between said first and second housing ends, said piston having a first housing end side and a second housing end side, a piston rod, said piston rod having a piston end mounted to said piston on said first housing end side of said piston and an extending end, said extending end of said piston rod being slidably extendable from said first housing end of said ram housing, a return means positioned within said ram housing between said second housing end of said ram housing and said second housing end side of said piston for moving said piston and thereby slidably extending said extending end of said piston rod from said first housing end

of said ram housing, and means for providing a fluid between said first housing end side of said piston and said first housing end of said ram housing for moving said piston and thereby retracting said piston rod into said ram housing, said second end of said ram housing being pivotally attached to said drive shaft support means and said extending end of said piston rod being pivotally attached to said drive shaft log.

22. (new) The watercraft drive unit as recited in claim 21 wherein, said return means of said hydraulic ram is a spring-return means.

23. (new) The watercraft drive unit as recited in claim 21 wherein, said return means of said hydraulic ram is a gas-return means.

24. (new) The watercraft drive unit as recited in claim 21 further comprising a drive shaft bearing mechanism for supporting said drive shaft within said drive shaft log, said bearing mechanism comprising:

- a) a bearing sleeve having a bore for supporting said drive shaft;
- b) a bearing sleeve housing for supporting said bearing sleeve; and
- c) means for threadably mounting said bearing sleeve housing to said drive shaft log.